DOCUMENT RESUME

ED 397 869 JC 960 463

AUTHOR Ashby, W. Allen
TITLE Questioning Critical Thinking: Funny Faces in a Familiar Mirror.
INSTITUTION Princeton Univ., NJ. Mid-Career Fellowship Program.
PUB DATE Jun 96
NOTE 20p.; In its: Issues of Education at Community Colleges: Essays by Fellows in the Mid-Career Fellowship Program at Princeton University; see JC 950 341.
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Classroom Techniques; *Critical Thinking; Educational Objectives; *Educational Philosophy; Higher Education; Institutional Mission; *Reflective Teaching; *Teacher Effectiveness; Teacher Role; *Teaching Methods; Thinking Skills

ABSTRACT

Although college mission statements related to promoting a sense of responsibility in students, fostering the desire to learn, and promoting critical thinking sound good, few people actually think about what the words mean or help teachers understand what practices might actually achieve those goals. Thinking skills taught in classrooms can vary from rote thinking, or learning to follow steps; right thinking, or learning to get the right answers; expressive thinking, or undertaking creative and independent activities; to critical thinking, or developing analytical intellectual powers. Ultimately, critical thinking will only occur if there is a critical question in front of the classroom. Critical questions exist when an issue is felt to be real by everyone in the class, students state their positions and give sufficient evidence to make their perspectives clear, there is a desire for dialogue, students can clearly state opposing viewpoints and realize that closure is not going to be possible, and connections can be made to dissimilar situations. To ensure that critical questions exist in the class, teachers might concentrate lectures into a set of questions, with at least one being critical, and write them on the board before class, hand them out to students, or have students ask questions individually. Contains 21 references. (BCY)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 397 869

Questioning Critical Thinking:

Funny Faces in a Familiar Mirror

Any new idea, Mahound, is asked two questions. The first is asked when it's weak: WHAT KIND OF AN IDEA ARE YOU? *Are you the kind that compromises, does deals, accommodates itself to society, aims to find a niche, to survive; or are you the cusssed, bloody-minded, ramrod-backed type of damnfool notion that would rather break than sway with the breeze? -- The kind that will almost certainly, ninety-nine times out of a hundred, be smashed to bits; but, the hundredth time, will change the world.*

"What's the second question?" Gibreel asked aloud

Answer the first one first. (Rushdie 335)

BEST COPY AVAILABLE

W Allen Ashby
Union County College
Dr Ted Rabb
History 520
Princeton University
1 June 1996

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

T.K. Rabb

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

JC 960 463

Faces in the Classroom Mirror:

It is Wednesday evening, and I am 45 minutes into my 75 minute World Literature class. I am lecturing on Salman Rushdie's *The Satanic Verses*, and I am trying to explore his *Doppelganger* pairings of names and events, a haunted house world where it is difficult to tell what's real and what's the reflection in the mirror. I have a list of over 30 of these destabilizing duplicates, beginning with the two major characters, Gibreel Farishta (the archangel) and Saladin Chamcha (the devilish Muslim Knight of Faith). They are falling to earth together. Page one. Seed pods. Sperm. The plane has exploded in mid-air. They are flapping their arms, and singing, locked in a literal transforming embrace. My list also includes such pairs as Gibreel's dream sequences of Mahound, the European devil name for the mirrored historical Prophet Muhammad: in history he has his twelve wives, in Gibreel's dream they are prostitutes in a brothel. It's like this. A mirror image of a mirror. I am talking from my notes, explaining that the fear and attraction that some of the characters have to the foot devil (Chamcha) that is stalking their dreams in London is an instinctual fear, when Jami raises her hand.

"Yes?"

"Dr. Ashby, I was just wondering. I mean you just said 'instinct,' but humans don't have any instincts, do they?"

"They don't have instincts?" And I can feel the credulity filling my face.

"No, I don't think so. I mean my psychology teacher told me last week that humans don't have instincts."

"That's right," Fred chips in. "That's what I read in my psychology book too."

I'm obviously baffled but before I can pick up the pieces, Ardelia is talking.

"You know I think he deserved it."

"Excuse me?" I say. "Who? Deserved what?"

"Rushdie," she says, "the *fatwa*."

"He deserves to be killed?"

"Yes. He slandered Allah."

"Oh, that's ridiculous" Tyrone says. "Anybody should be able to say anything they want. You can't kill somebody for words."

"Then why did you slap me in the car last Sunday when I told you I went out with Ranbir" Tyrone's girlfriend Celia asks, pivoting around from the seat in front of him so that she can face him? "You didn't respect my words, did you? You were just conducting your own personal *fatwa*."

{And in my inner ear I'm hearing Mahound's scribe, Salman (another double) who has altered Mahound's divine dictation, answering Baal's question: "Why are you sure he [Mahound] will kill you?" by saying because "It's his Word against mine" (368).} But before Tyrone can answer, Karen has stepped in. "No," she interrupts, "you can't just say what you want. I mean you can't teach sex to young kids in school. As a parent you have to control what they hear and see on television and on computers. For example, if you teach evolution in school, then you have to teach creationism because evolution is just a theory."

And I turn to look at the clock. There are 29 minutes left and I know now I am not going to escape unscathed, not even if I could get back to my lecture notes. I too am falling to earth. The plane has exploded. It's a game of Hide and Seek, and I'm it.

* * * *

The End of the Beginning of Questioning:

This is a simple paper really, with a simple beginning and a simple end and so let me get to the punch line early and then if you don't have time to finish it (and to see what happened to my class) you can just relax and feel comfortable knowing that even if you missed the middle at least you got the end. to wit:

Thinking is questioning. Only, what is a question? **And** if thinking is questioning,

Then what are declarative sentences for?

So, I listen to Jami and Fred and their twin authorities on instincts: a colleague (?) and a text book, and what I really want to say to them is: "How do you know they are telling you the truth?" And I want to turn to Ardelia and ask her: "Would you kill him if you had the chance, or how about if they asked you to just stone him to death?" And I want to turn to Tyrone and Celia and ask them:

"When you offer someone an opinion, how are they supposed to know if it is valid for them?" And I want to turn to Karen and say "What? What? What? Can you just please connect the dots?"

But, of course, I don't say any of that. For a moment I just stare. And the class like a mirror stares back.

Mission Impossible:

But let me start at the real beginning, before the semester has even opened, before I have even written up my syllabus, before I even started teaching at the college 26 years ago. Let me start with our *Catalog* and our Mission Statement since, as much as anything else, ideally that should determine what it is that I am attempting to accomplish in my class. So, here is a piece of it, and though the numbering and spacing is mine, this is real enough (though what is unreal?).

> The College (1) strives to promote in students
> (1a) a sense of responsibility for their own development and
> (1b) an understanding of their obligations as members of a democratic society
> The College (2) fosters in students
> (2a) the desire to learn,
> (2b) the ability to think clearly and
> (2c) express themselves effectively,
> the (3) habit of
> (3a) analytical and
> (3b) reflective thought, and
> (4) an awareness of
> (4a) themselves,
> (4b) their heritage,
> (4c) other cultures, and
> (4d) their environment

Now I'm the first to admit that it's no fun to poke a dead elephant, not even to see if it's dead and so I won't ask the obvious question in this paper on "Teaching For Critical Thinking", namely Does anyone really ***think*** we are doing this? Students, parents, faculty, staff, members of the Board, local politicians, visitors from Vanuatu? Or let's say they do. Then how would I know if what I was doing is furthering this mission? And don't get me wrong. The goals are fine, even if I'm not quite sure of the difference between developing "a *sense* of responsibility" and developing responsibility, or even if I don't know how one "fosters [a] desire," or even if I'm not quite sure what a "habit" of analytical and reflective thought is (it sounds like an instinct to me). No, for me, the problem is that no one, to my knowledge, is ***thinking*** about what these words mean. No one is helping me or the institution understand how I would know if I was {or was not} "promoting" and "fostering" these

laudable goals [though is that what thinking is: creating ways of measuring success and failure?] And so consequently at this moment this Mission Statement seems to me to be an oxymoron and about as valid as Tyrone's "anyone should be able to say anything they want," which I guess they have.

Still, evidently one of my appointed Missions (2b and 3a & 3b) is to "foster in students the ability to think clearly ... analytical[ly] and reflective[ly]." And so maybe I need to understand what *thinking* is and is not, and whether or not Jami and Fred, Ardelia, Tyrone and Celia, and Karen are on the edge of it or not, and if they are, what might push them over. They hide; I seek.

Nietzsche Grins:

[Rule 1: When you don't know what you are doing, back up as far as you can.]

Heidegger writes that "Western man (sic) from early on had to ask the question, *Ti estin epistēmē?* 'What is that--knowledge?'" (22). And he answers his own question by saying that traditionally "In Western history, knowledge is taken to be that behavior and that attitude of representing by which what is true is grasped and preserved as a possession" (23-24), "that truth is correctness" (34), a correspondence to a previously existing reality. Whereas for Nietzsche, Heidegger writes, "truth itself is an 'illusion,' a mirage" (25), it is only a perspective, and not true in itself. "As opposed to 'Being,'" he continues, "Nietzsche posits Becoming as a higher value" (65), and therefore "There is no 'true world' in the sense of something remaining the same in itself and eternally valid" (128). Truth, like knowledge, is an evaluation, a "will to power". For Nietzsche all facts are interpretations, bound to a particular perspective. The world **is** a mirror; it does not carry what we see, and therefore finally "We can comprehend only a world that we ourselves have made" (Nietzsche 272). Seeing is creating. Or as Rushdie says: "Language is courage: the ability to conceive a thought, to speak it, and by doing so to make it true" (281). It **is** my Word against yours. Endlessly.

Grin and bear it. But, how do I know if Nietzsche is telling the truth? Or Muhammad? Or Mahound? Or Rushdie? Or Celia? Or to bring this closer to home: in my own classroom do I believe that I am teaching the truth? Do I want all my students to get the same answers on the tests I create? Because if I accept Nietzsche's understanding of truth, that it is something we create and not something that is already there before we enter the class, then this should change how I act in the class. But before I try to toss a bone to this dog, let me take a detour in order to set up this paper's central paradigm.

The Faces of The Fifth Grade Children

The article was like a revelation to me, though as Rushdie says "To be born again, first you have to die" (403). So I guess the mirrored question is: What died?

Jean Anyon teaches in the Education Department at Rutgers, Newark. Somewhere in the late 1970s she visited some fifth grade classes in four different New Jersey school systems and reported her findings in a book entitled *Social Class and the Hidden Curriculum of Work*. In her analysis (is this what *thinking* is?) she classified the schools by the median income of the families and by their jobs, and then she categorized the schools as "working class," "middle class," "affluent professional," and "executive elite". Then as she turned her attention to what exactly went on in the classroom she looked at four areas:

(1) the fundamental philosophical aim of the class,
(2) the role of the teacher's questions,
(3) what is most important, and
(4) the degree of control the students have in the classroom.

Sketched below is my interpretation of her interpretation. (Is such a summary of an article an indication of *thinking*?)

1. **Working class**

Work: assembly-line, gas stations, waitress, sales clerks.
Income: near poverty level ($7M) to $12M = 40% of the people in the US.
In school:

The work is to follow steps, to follow rules, obey, copy, and follow rote behavior.
The teachers ask no questions (unless to ask: did you understand? did you copy this down?). Rather they give orders.
Atmosphere seems capricious, things belong to the teacher, no materials for the kids.
Teachers often shout.

2. **Middle class:**

Work: police, construction, middle management, Burger King bosses.
Income: $13-25M = 40% of the people in the US.
In school:

The work is to get the right answers. Students figure out the directions themselves, and try to find the right answer which results in a good grade.
The teacher's questions are designed to test that you've read the material.
Neatness is important.
Boredom for all present.

3 **Affluent Professional:**

Work: cardiologist, lawyers, ad executives
Income: $40-80M = 7% of the people in the US
In school:

The work is creative activity carried out independently.
The teacher's questions ask students to expand, to give more details, to be more specific, emphasis is on student choice and decision making
What's important is individual thought and personal expressiveness
The children have some say in what will happen in class

4 **Executive Elite:**

Work: CEOs, Presidents and Vice Presidents, Wall Street executives
Income: $100M up = <1% of the people in the US
In school:

The work is developing one's analytical intellectual powers.
The teacher's questions are to help reason through a problem. Rather than right and wrong answers, what's important is whether you agree or not
Formal elements more emphasized than expressive: e.g. structure of plot rather than personal creativity
Students are encouraged to take charge, teach classes, check each other

For Anyon the bottom line is that economic class has predetermined a hidden structure of these fifth grade classrooms, and that "the 'hidden curriculum' of schoolwork is tacit preparation for relating to the process of production in a particular way" (59). In short, there are four kinds of thinking: for the "working class" there are rules and role behavior, for the "middle class" the aim is to find the right answers, for the "affluent class" the aim is personal expressiveness, to be able to justify your opinions by citing details, and for the "executive elite" there is the recognition that thinking is a process that does not lead to definite answers, but is an open-ended exploration.

And so at what hidden class level have we set up the Community College and our own classrooms?

Jami and Fred believe they have the right **answers**, because those answers correspond to a source outside of themselves, something they have heard and memorized, something that is true.

Ardelia believes her **conviction** is right because it corresponds to her cultural and religious upbringing.

Tyrone believes his **opinion** is right, and Celia believes her **feelings** are right.

And Karen believes her **ideas** are right because she is now ready to give me her **reasons** for them. But none of these students, at this moment, are ready to believe that they might be wrong, and that, for Anyon and for me, is the first failure of American education, because instead of teaching thinking we are teaching right and wrong. Right? Or wrong?

Cul de Sac:

The Mission Statement informs me that one of my missions ("Should I choose to accept it?") is to " foster the habit of reflective thought " Now " reflective thought" is a term coined and minted in 1933 by John Dewey, a term which was subsequently transubstantiated into "critical thinking" What Anyon has added to this discussion is the awareness that there are at least four levels of thinking, what I want to call ***"rote thinking"*** (memorization, like the multiplication tables, or how to drive home from work without really thinking about it), ***"right thinking"*** (which is predicated upon the notion of getting a right answer), ***"expressive thinking"*** (which more often than not involves personal opinions (which are believed to be right) illustrated and substantiated by facts), and true ***"critical thinking"*** (which uses the expressive techniques of evidence and proof, but which actually is open ended in its conclusion In "critical thinking" the hypothesis you are trying to prove is actually perceived *by you* as a question Nietzsche Grins) Hide and you shall seek

By the way, as a cul de sac in this cul de sac, it is probably worth nothing that Anyon's four levels closely parallel Bloom's Taxonomy with its six levels of thinking Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation And it also, as we shall see, quite closely parallels Perry's "Nine Stages of Intellectual Development " But finally, as we try to exit from this cul de sac, I take it the implicit or explicit (and does it matter which it is?) question at the conclusion of Anyon's analysis is "Do each or any or all of these fifth grade teachers know what they are doing?" And the problem is, it's a lose-lose situation because if they do know, then why in the first three school systems would they develop kinds of thinking in their students that would so handicap them both personally and economically, and if they don't know, then what kinds of teachers are they? But this can get worse "Mirror, Mirror on the wall " since if we invited Anyon to sit in on our classes for a semester, would she detect all four levels of thinking in our classrooms, and how much time would she detect being spent at each level?

What kind of an idea is this? And Is there no way out?

Hydra Asks and Answers a Heady Question:

And now I know that I'm going to overstate my case, but hey, what's a case for, and whose case is it anyway? Let's call up the monster Evidently one of Hydra's heads is immortal It is **The Fundamental Principle** head We are in the middle of it now It speaks: It says

> *That if there is not a critical question in the front of the classroom, then "critical thinking" is not going to occur.*

It may be useful information, it may be lifesaving information, but if it is not information in the service of a critical question, then it isn't "critical thinking." It may be entertainment, it may be aesthetically or personally meaningful, but if it isn't centered in a critical question, it isn't "critical thinking." It may be the semester's best rap session. Tyrone and Celia finally trash it out and everybody piles on, but no matter how much everyone shares opinions, feelings and personal stories, if it isn't centered in a critical question, then it isn't "critical thinking." [Though by the way: is there a place for rap in the classroom? You betcha. Because in such a class the students may be getting "an understanding of their obligations as members of a democratic society," "expressing themselves effectively," and becoming "aware of themselves [and] other cultures," all good Missions all, but hey, it still isn't "critical thinking."] And finally, we may be solving a real questionable problem: "If the oceans rise 6 feet by the year 2020, how much concrete will it take to keep Atlantic City above water?" But if we can solve it, then it isn't a critical question and it isn't "critical thinking." [Though again: is this activity valuable? Absolutely. Because when I take my clanging car to the mechanic do I want her to get the right answer? Absolutely! And when I tell the manager at Burger King: "Hold the tomato," I want him to hold that tomato. I want him to "get it right." Absolutely right. No wrong about it. But when the tomato is not there, it's still not *critical thinking*, not in Anyon's world, or Rushdie's, or Nietzsche's or in mine.] Because all of these are uncritical questions.

So, "critical thinking" isn't: information processing, aesthetic enjoyment, rap sessions or problem-solving. And furthermore if I ask a question I know the answer to, then "critical thinking" is not going to occur. And consequently the crucial question becomes: how do I get the classroom centered in a critical question? So: head to head, "Heeeere's Allen" asking Hydra the crucial (uncritical) question: "What are the characteristics of a critical question?" And here's her heady reply:

The Beginning of the End of Questioning:

In the first place (1) it has to be **felt** as real by everyone in the class. It must spark their curiosity because as Aristotle says, "All knowledge begins in wonder" and if the "wonder" isn't there, it's Teflon all the way down to the turtles. A tape recorder does not create meaning, and since, "we can comprehend only a world that we ourselves have made" those students who don't fundamentally feel the question aren't going to be thinking critically. And how do you tell if they are genuinely caught by wonder? Well, the hands go up, everyone wants to talk. *You* can feel it. That's the first necessary characteristic. And the next (2) is the student's ability to **state her position** about the

question. It's Karen's turn at the head of the class, and then (3) she has to **give sufficient evidence** facts, details and examples to make her perspective clear. (Ardelia has got to give reasons why Rushdie should be reduced to ashes, because faith is not *critical thinking*, not Ardelia's or Jami's or Fred's.) Nietzsche Grins. And next? (4) a **desire for dialogue**, an awareness that every position has a counter position, (a funny familiar face in the mirror) and that no position is absolute, and that all positions are personal perspectives. It is the awareness that your position is the beginning of a conversation and not the end. It is a desire to actually want to hear other opinions and the evidence behind them, and at some point (5) to be able **to state those opposing or alternative viewpoints** in your own words and with a clarity that your opposition can accept. Critical thinking is pluralistic. (6) a conscious realization that a **final closure is not going to be possible**. No poem, Auden says, is ever finished, it is only abandoned. So, critical thinking is not unanimity, and if a 100 means that everyone got the same answers, then it can't be *critical thinking*. But still more. (7) it is only *critical thinking* when the person can **connect** their perspective position to other dissimilar situations. In this respect Celia **is** *thinking critically* when she challenged Tyrone because she has told Tyrone that there is a disconnection between his opinion expressed to Ardelia in a classroom and his action expressed to her in a car. She has connected the dots in a line he cannot yet see. And finally, (8) it is only *critical thinking* when the thought can be **turned into a metaphor**, when Jami can say: "You know Dr. Ashby I might just be wrong, because my question to you was instinctual. I mean I didn't think about it at all before I said it. It's the same way I buy burgers, brush my teeth, and signed up for your class." And now we are really in the presence of thinking, don't you think?

If They are Trying to Sell it to You, It's Probably Because They Don't Want It:

So, you can only teach thinking by questioning. You can't teach thinking by teaching logic. "There is no experiential evidence that geometry necessarily improves one's ability to reason" (Shermis 5). And what is true of geometry is true of Latin and computers and most lecture and discussion classes, as it is also true of Mission Statements. And so the question becomes. If critical thinking only occurs in the face of a critical question, and if I am interested in fostering critical student thinking, then how can I get my classroom centered in a critical question? Let's do the praxis. Let's get that elephant to dance.

Nietzsche Goes to Class:

If Anyon is right and there are at least four kinds and levels of thinking, then there must also be four kinds and levels of corresponding questions. So, a "rote question" must be a question the

teacher asks that she, and she hopes the students, already know the answer to. A "right question" is one that requires reasoning, but the answer lies in an agreed upon source outside the answer and the answerer. We can look it up in a book. An "expressive question" lies mid-way between the truthfulness of a "right question", and the openness of a "critical question." The "expressive question" calls for an opinion that can be backed up by evidence.

But finally if what we really want to be able to do in the classroom is not just argue, debate and hurl words at each other like grenades, if what we want is to genuinely open ourselves to the exploration of ideas, then what we want is a "critical question." For in the presence of such a question the classroom stops being a battleground and becomes truly liberated. As Edward Said notes in another context, in the presence of such a question, the sibilant fights over the national boundaries dissolve and in Aimé Césaire's words, we recognize that "No race possesses the monopoly of beauty, of intelligence, of force, and there is a place for all at the rendez-vous of victory" (181). The old authorities are dissolved, deconsecrated, and instead of being separated by our partisan disagreements we are collectively engaged in the creation of truths which we are sharing with each other, even as we agree to disagree about which particular truth we will finally want to personally embrace.

But as I try to turn toward being more practical and eventually to return to my own classroom, let me start with the most difficult teaching paradigm to open to critical questions, namely the classroom as a lecture hall. For while it is true that from a student perspective that taking notes and struggling to get the right answers on objective tests doesn't seem to have anything to do with critical thinking, still from a teacher's perspective it is obvious that implicit in every lecture is a critical question. For example, implicit in Anyon's essay lecture was the question "How can we make teachers aware that the kinds of questions that they ask, and don't ask, in a classroom perpetuate class structures?" And since that question doesn't have an answer, except as we individually try to enact it, it is a critical question hidden beneath the essay that we read.

So as teachers what we need to do in a lecture class is to get the critical question out in the open. Upfront. In Your Face. No more hide and seek. Found. And this can be done even in math classes, and if it isn't done then as teachers we are treating the students as if it doesn't really matter if they are there or not. Said would call this Imperialism and he would see in the students' boredom and random and unconscious acts of disruption a weak attempt at class struggle, an attempt by the students to devalue the classroom and their bondage to the Emperor in it.

So, let me try to get the question into the open, and let me start on the first day of class. Ira Shor says we should just begin with where we are. He says "In my writing class [I] began with the question 'What is good writing?' In a math class, the question asked might be 'What is mathematics?' followed by 'What are addition, substraction, division, multiplication? Can you define them in your own words and experience?' [in history] 'What is history?' This initial question could be followed by 'What history is most important to you? What do you want to know? Do you have a history? How would you find out about your history? Is your history different from your parents' or grandparents' history? Is history changing over the years, getting better or worse than it was in the past? Does history affect your daily life?'" (76)

What we are trying to do here is to connect what we are going to study during the semester with where the students actually are when they come into the classroom. By raising such fundamental questions the first day of class we are asking the students to begin a process of relating *everything* that will occur back to their own attempts to construct meaning, putting into practice Nietzsche's dictum that "We can comprehend only a world that we ourselves have made" (272).

Then, as lecturers what we need to do is to concentrate each lecture into a set of questions, and write those questions on the board before the class begins or have a handout that we can distribute as the class begins. These questions for the lecture can be in all four question forms or in only some of them, but in every case they need to include at the end at least one "critical" question. For example in a biology class on the hand, a series of possible questions might be:

Rote:	What are the parts of the hand? What are the unique characteristics of the human hand?
Right:	How many bones, muscles and tendons are there in the human hand? And how do they function?
Expressive:	What are some accidents that could happen to the human hand, and what would be the results in each case?
Critical:	Why is it so difficult to create a robot that can pick up a glass of water? How does the movement of the hand compare to other movements the body can make? What are some disadvantages in having hands?

It is not necessary for the lecture to address all the questions, though it might be interesting to set aside the last 10 minutes to allow the students to single out and discuss one of these questions, or have the students write about one of the questions. The teacher could collect these responses and after each class randomly read and write comments on five of them and then hand them all back at

the next class. The students could keep their responses in a folder and from time to time the teacher could collect the folders to get an overview and to ensure that every student was getting some written response from the teacher during the semester.

Another possibility is to allow the students to ask the questions, to randomly hand out say five 3x5 cards and ask those students to turn the lecture into some questions, and then take the last 10 minutes and let the students read them out loud and answer them. Or again the teacher could ask every student to spend the last 2 minutes of the class writing out a "critical" question based on that day's lecture. These questions could be collected, or perhaps better yet have five students read theirs when the next class begins and briefly have the teacher and/or students respond to them. Or the students could put the questions on the blackboard before the class begins, as a form of Board Pass, or they could use these Board Passes to also ask questions about that day's readings before the lecture begins.

Or again, the teacher could create a set of questions a week or more in advance of the lecture and have the students, individually or in small groups, present a quick verbal report on them on the day of the lecture. Again, especially in the sense of "right" or "expressive" questions this would be quite easy to accomplish. For example, how does the blood circulate and what does it do for the body? What are the four major causes for the Civil War? What are three reasons this is a good novel? What does Freud's theory of the unconscious mean, and how valid is it? What is the process involved in solving bilinear equations and what might they be used for? Certainly there is plenty of evidence that "Students in [a] peer-teaching group spent more time on the material, rated themselves as more active in the learning process, and performed better on both informational and conceptual tests than students who were simply studying for themselves" (Kurfiss 48). And so even apart from the knowledge gained, there is an affective dimension to this process of getting students involved in the questions, rather than in just copying down the answers.

Then, if one aspect of "critical thinking" and "critical questioning" is to **connect** their perspective to other dissimilar situations, and be able to turn it into a metaphor, then at some point during the lecture process the whole subject matter of the lecture itself needs to be connected metaphorically and practically to other issues. For example, in a course in the History of Painting, the teacher could reverse the lecture and enlarge it by saying something like: "OK we've been studying early Renaissance Dutch painters. Now what makes them different from the Italian painters we were studying last week? And different from the ads we see in magazines today?" Or in a History

BEST COPY AVAILABLE

class "What three things could the Third Reich have done to win the war?" Anyon herself could have attempted this in her own essay by placing a series of open ended questions at the end. "Are there any other levels of thinking besides these four?" "Are there instances where these levels don't apply?" "Can these four levels be applied to other areas, for example emotional or spiritual states, elements of physical perception, kinds of friendship?"

But all of these, obviously, are just ways of foregrounding the questions, and especially trying to foreground "critical questions" in a lecture environment, and while it would be easier to extend all these ideas into discussion classes and seminars and even into lab sections, it would not be fully valuable in itself if the teacher does not also address the substantial issue of student evaluation. Because what matters to the student is the test and for the most part tests in a collegiate setting are "rote" and "right" questions and "rote" and "right" answers. So if an instructor and an institution are serious about the Mission of critical thinking, then a piece of every exam needs to be an essay that is a response not only to an "expressive" but also to a "critical" question. Though perhaps a part of the student's grade could be a weekly written response to that week's "critical question", a journal of critical responses. Or for the tests and exams, perhaps the students should be encouraged to submit the questions themselves and the teacher could pick from those submissions and redistribute five of those questions and say that one of them will be on the exam. And if the teacher is really interested in building critical thinking, then it is important to let the students see essays which work compared to those which don't, and so when the tests are handed back the teacher might want to take three essays, an example of an A, C and F, take the names off and let the students have a copy and take some class time to discuss why they think they are graded that way. Another idea is to distribute 10 possible final exam essay questions in the first class, and let the students keep them in mind as the semester unfolds.

But obviously what is essential in all of this is to foreground the questions that support what we are really trying to accomplish in **each** class, and to have the students participate as fully as possible in the creation and selection of those questions. But as I turn now to my own classroom, let me first forewarn you of what I believe to be the most serious impediment to accomplishing this task of helping our students become genuine critical thinkers. It a race to reach home.

Caveat Emptor:

There is substantial evidence that students who can only do "rote" and "right" thinking, do flounder and fail when we try to get them to think expressively and critically. If you have been

driving on the right hand side of the road all your life, it is difficult to make that switch to the left when you rent that car in London So let me return for a moment to Perry's stages and set up a microscopic lens though which we might better see what is going on with Jami & Fred, Ardelia, Tyrone & Celia, and Karen

In her book, *Critical Thinking: Theory, Research, Practice, and Possibilities*, Joanne G Kurfiss attempts to fuse William Perry's "Nine Stages of Intellectual Development" and Mary F Belenky's corrections and emendations to Perry from her book *Women's Ways of Knowing: The Development of Self, Voice, and Mind* into a developmental whole comprised of four stages Level 1 she describes as **"Dualism/received knowledge"** where students believe that "learning is simply a matter of acquiring information delivered by the professor in concert with the text [and] is either correct or it is not For these students, the concept of interpretation, essential to critical thinking, is puzzling" and many of these students will just opt to "keep quiet until [they] really know just what the answer is" (52-53) Level 2 is **"Multiplicity/subjective knowledge"** where because students perceive conflict in authorities, they "begin to develop trust in their 'inner voices' as a source of knowledge Students at this level recognize complexity but have not yet learned how to navigate its waters They perceive no basis other than intuition, feeling, or 'common sense' on which to judge the merits" of the conflicting opinions of others (53-54) Level 3 is **"Relativism/procedural knowledge"** and here "students [begin] to realize that 'opinions' differ in quality Good opinions are supported with *reasons*." Belenky calls this "connected knowledge" because the women in her study are deliberately attempting "to understand the reasons for another's way of thinking" and consequently are much more empathic than at level 2 By the way, for those who might believe that genuine "expressive" thinking doesn't begin until level 3, and "critical thinking" doesn't begin until level 4, it is probably disheartening to note that "Subsequent studies have found fewer than half of college seniors subscribing to this [level 3] epistemological perspective" (54-55) Level 4 is **"Commitment in relativism/constructed knowledge"** and here the students "include the *self* in their knowing process [and] are committed to nurturing rather than criticizing ideas, [and] seek integrated, authentic lives that contribute to 'empowerment and improvement in the quality of life of others'" (55-56)

Now as Shermis says "before students can think reflectively, they must experience some degree of confusion, puzzlement, bewilderment, or disorientation" (30) But for those students who are mired in a level 1 epistemology, this confusion only makes them angry or silent, and while those who have fallen into the pit of level 2 will gladly voice their opinions, they may often not be able (for

prior epistemological reasons) to really listen to anyone else's opinions. So we can see that Jami's litany that "humans don't have any instincts" because her psychology teacher told her so, and Fred's concurrence because he read it in his psychology book are both, on the surface at least, indications of level 1 thinking, and it may be that even the most carefully crafted set of questions will never lead them out of the sludge they are mired in.

Equally Ardelia's justification of "the *fatwa*" because it supports her Islamic religious beliefs and Tyrone's sense that "Anybody should be able to say anything they want" are likely candidates for level 2 thinking, and it's possible that no amount of discussion is going to permit them to "hear" another viewpoint other than their own, and in fact Celia's personal question to Tyrone concerning why he slapped her for her words may be falling on deaf ears, although her ability to make the connection between the *fatwa* and her personal relationship and to do so with genuine feeling probably does indicate that she is capable of level 3 thinking. And to perhaps a lesser degree the same might be true of Karen's rejection of Tyrone's opinion with her examples of forbidding sex education to young kids in school, and her confused connection to the equality of evolution and creationism.

Mission Possible:

But OK, sludge and pits aside, let me return to my class. It's not going to go away, and there are still 29 minutes left. Let me see if I can honestly create for you a series of questions that would lead from their rote and right comments through the mode of expressive discourse to some genuine and lasting critical thoughts. Though it should be noted that one reason to sequence questions and put them ideally in sets of four is to enable each student to be a full participant in the class at their own epistemological level, and at the same time, the hierarchical arrangement of questions helps the students understand the four levels of thinking, questioning and valuing.

Jami & Fred:

Rote: What is it that your teacher and the psychology book said exactly about instincts? And what are some examples of them?

Right: How do psychology and biology define instincts?

Expressive: Can anyone think of traits that we might, perhaps even incorrectly, identify as instinctual, in humans or in animals? And if we do not want to call these traits instincts, what do we want to call them?

Critical: What is the opposite of an instinct? And since Rushdie seems to be questioning the validity of a certain kind of fundamentalist faith, what are the differences between that faith and what Jami and Fred regard as instincts?

Ardelia & Tyrone:

Rote: Both Ardelia and Tyrone believe their opinions are right. What is an opinion?

Right: What are some differences between opinions and knowledge?

Expressive: Rushdie begins his novel with two men falling at 31,000 feet from an exploding aircraft, and surviving by singing and flapping their arms. Obviously that's his opinion. But in what ways is it a legitimate opinion, and in what ways is it not legitimate?

Critical: What is the *fatwa* against Rushdie an opinion about? In what ways are its underlining concerns legitimate? Rushdie talks a lot in the novel about what is unforgivable? What kinds of things do we find unforgivable, and why?

Karen:

Rote: Karen also disagrees with Tyrone's opinion. She thinks there are important objective rules of behavior that should apply to everyone, rules protecting children for instance, and rules about fairness in respecting different theories. In this respect she seems to agree with Ardelia when Ardelia believes that there is an objective rule about blasphemy. Still, is this a fair statement about Karen's position?

Right: Rushdie gives a number of examples where objectively the English and the Indians see a similar situation in very different ways. Can you describe some of those places in the novel?

Expressive: As a result of this perception Rushdie seems to believe that some or all of our objective rules for behavior are culturally conditioned, and that this is one of the difficulties of being an immigrant who can no longer feel at home in either culture. Is he right about this?

Critical: One distinguishing characteristic of the postmodern is precisely this opinion, that no position or perspective is privileged, that all belief is relative and finite, and that truth is created and does not exist outside of us. Do you believe this? And if this was "true", how is it different from Tyrone's original opinion?

Celia:

Rote: Celia said that Tyrone shouldn't have slapped her for speaking. What is it that Tyrone said that makes her believe that? And is she right that there is a discrepancy between Tyrone's opinion and his actions?

Right Celia seems to believe that consistency is an important human characteristic. But Walt Whitman says: "Do I contradict myself?/Very well then I contradict myself,/(I am large, I contain multitudes)" (95). Can we identify in Rushdie places where consistency should be let go and where containing contradictions is harmful?

Expressive: How are we to resolve this problem?

Critical: And what are the connections between this problem and what makes people violent?

[Allie Allie Home Free:

Well, you've got to admit, almost any of these questions is probably a lot more interesting than what I was doing before I was interrupted by their damnfool notions. Still, it's time to end this game, close this class, set out for home. I told you at the beginning, my end is simple, and so it is, a simple koan.

The question is our mission: our mission is the question.

The only question is. Can we be upfront and outfront about each class's critical questions? Can we make critical thinking a daily habit for ourselves and for our students, because the truth is (as e e cummings says) "Always the beautiful answer who asks a more beautiful question" (332). Can we do it? That is the first question, though as Rushdie says, what **is** that "second question?" But I know, I know, I know the rules. Answer the first one first.

Bibliography

Adams, Maurice, ed. *Promoting Diversity in College Classrooms: Innovative Responses for the Curriculum, Faculty, and Institutions.* San Francisco, California: Jossey-Bass, Inc., 1992.

Anderson, Charles W. *Prescribing the Life of the Mind.* Madison, Wisconsin: The University of Wisconsin Press, 1993.

Anyon, Jean. "From Social Class and the Hidden Curriculum of Work". *Rereading America.* Eds. Gary Colombo, Robert Cullen and Bonnie Lisle. Boston: Bedford Books of St. Martin's Press, 1995. 45-60.

Capossela, Toni-Lee, ed. *The Critical Writing Workshop.* Portsmouth, NH: Boynton/Cook Publishers, Inc., 1993.

Cummings, E. E. *Poems 1923-1954.* New York: Harcourt, Brace & World, Inc., 1954.

Freire, Paulo. *Pedagogy of Hope.* Trans. Robert R. Barr. NY: The Continuum Publishing Co., 1994.

Gannaway, Gloria. *Transforming Mind: A Critical Cognitive Activity.* Westport, Connecticut: Bergin & Garvey, 1994.

Heidegger, Martin. *Nietzsche: Volume III & IV.* Ed. David Farrell Krell. San Francisco: HarperCollins Publishers, 1987.

Kanpol, Barry and Peter Mc Laren, Eds. *Critical Multiculturalism.* Westport, Connecticut: Bergin & Garvey, 1995.

Kurfiss, Joanne G. *Critical Thinking: Theory, Research, Practice, and Possibilities.* ASHE-ERIC Higher Education Report No. 2. Washington, D.C.: Association for the Study of Higher Education, 1988.

McPeck, John E. *Teaching Critical Thinking.* NY: Routledge, 1990.

Nietzsche, Friedrich. *The Will to Power.* tr. Walter Kaufmann. NY: Random House, 1967.

Paul, Richard. *Critical Thinking.* Sonoma State University, Rohnert Park, CA: Center for Critical Thinking and Moral Critique, 1990.

Rushdie, Salman. *The Satanic Verses.* NY: Viking Penguin, 1988.

Said, Edward W. *Culture and Imperialism.* New York: Vintage Books, 1993.

Said, Edward W. "The Politics of Knowledge." *Debating P.C.* Ed. Paul Berman. NYC: Laurel, Bantam Doubleday Dell Publishing Group, 1992. 172-189.

Shermis, S. Samuel. *Critical Thinking: Helping Students Learn Reflectively.* Bloomington, Indiana: ERIC Clearinghouse on Reading and Communication Skills, 1992.

Shor, Ira. *Empowering Education: Critical Teaching for Social Change.* Chicago: University of Chicago Press, 1992.

Tierney, William G. *Building Communities of Difference: Higher Education in the Twenty-First Century.* Westport, Ct: Bergin & Garvey, 1993.

West, Cornel. "Diverse New World." *Debating P.C.* Ed. Paul Berman. NYC: Laurel, Bantam Doubleday Dell Publishing Group, 1992. 326-332.

Whitman, Walt. *Whitman's 'Song of Myself'--Origin, Growth, Meaning.* Ed. James E. Miller, Jr. NY: Dodd, Mead & Company, 1971. [*Song of Myself* 51, lines 6-8]